R_8 and R_7 are H; or R_7 and R_8 taken together form a bond; and

R_6 is H; or

a pharmaceutically acceptable solvate, hydrate, or salt thereof.

3. The pharmaceutical formulation of claim **1** formulated for a route of administration selected from oral administration, parenteral administration, buccal administration, nasal administration, topical administration, or rectal administration.

4. The pharmaceutical formulation of claim **3** formulated for oral administration.

5. The pharmaceutical formulation of claim **4**, wherein the pharmaceutical formulation is in solid dosage form.

6. The pharmaceutical formulation of claim **5**, wherein the pharmaceutical formulation is contained in one or more capsules.

7. The pharmaceutical formulation of claim **5**, wherein the pharmaceutically acceptable excipient comprises one or more carrier materials selective from the group consisting of binders, disintegration agents, surfactants, lubricants, and combinations thereof.

8. The pharmaceutical formulation of claim **7**, wherein the pharmaceutically acceptable excipient comprises a binder, a disintegration agent, and a surfactant.

9. The pharmaceutical formulation of claim **8**, wherein the binder is present in the pharmaceutical formulation at an amount of from 20 to 70 w/w %.

10. The pharmaceutical formulation of claim **9**, wherein the binder is microcrystalline cellulose.

11. The pharmaceutical formulation of claim **8**, wherein the disintegration agent is croscarmellose sodium.

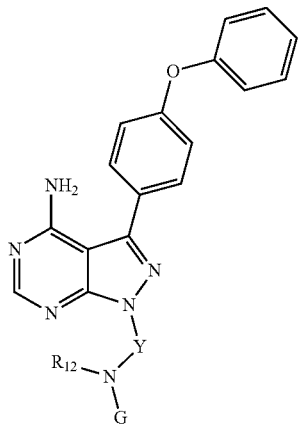
12. The pharmaceutical formulation of claim **8**, wherein the surfactant is sodium lauryl sulfate.

13. The pharmaceutical formulation of claim **8**, wherein the pharmaceutically acceptable excipient further comprises a lubricant.

14. The pharmaceutical formulation of claim **13**, wherein the lubricant is magnesium stearate.

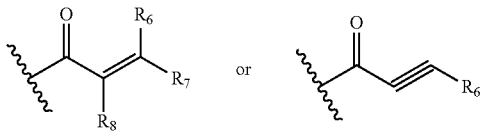
15. The pharmaceutical formulation of claim **1**, wherein the compound of Formula (A) has the structure:

Formula (C)



Y and R_{12} taken together form a 4-, 5-, or 6-membered heterocyclic ring; and

G is

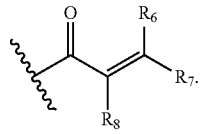


wherein,

R_6, R_7 and R_8 are independently selected from among H, lower alkyl or substituted lower alkyl, lower heteroalkyl or substituted lower heteroalkyl, substituted or unsubstituted lower cycloalkyl, and substituted or unsubstituted lower heterocycloalkyl; or a pharmaceutically acceptable solvate, hydrate, or salt thereof.

16. The pharmaceutical formulation of claim **15**, wherein Y and R_{12} taken together form a 6-membered heterocyclic ring.

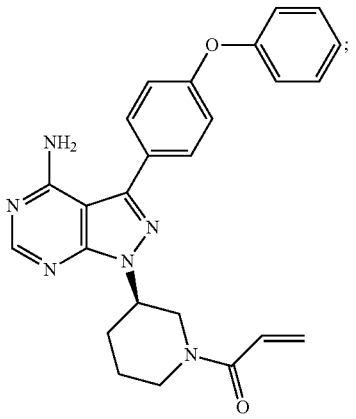
17. The pharmaceutical formulation of claim **15**, wherein G is



18. The pharmaceutical formulation of claim **15**, wherein R_6, R_7, and R_8 are independently H.

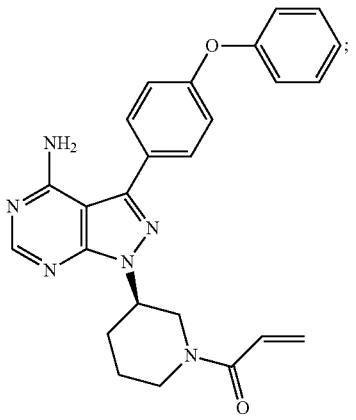
19. The pharmaceutical formulation of claim **2**, wherein La is O, Z is C(O), and R_6, R_7, and R_8 are independently H.

20. The pharmaceutical formulation of claim **1**, wherein the irreversible Btk inhibitor is a compound having the structure:



or a pharmaceutically acceptable solvate, hydrate, or salt thereof.

21. A pharmaceutical formulation comprising an irreversible Btk inhibitor having the structure:



and a pharmaceutically acceptable excipient.

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